

Implementation of the revised and updated TB
Contact Investigation strategy in the Kyrgyz Republic

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Background

Kyrgyzstan has a high burden of drug-resistant tuberculosis (DR-TB); 29% of new TB cases and 60% of previously treated cases are DR-TB (WHO Global TB Report 2020).

The **TB contact investigation (CI) process involves two groups**. The **Sanitary and Epidemiological Service (SES)** conducts epidemiological investigation of Index Cases (IC) and identification of TB contacts. **Primary Health Care (PHC)** centers conduct examination and follow-up evaluation of TB contacts.

According to National TB Program 2018 data:

- CI was conducted for only 50% of ICs due to limited SES human/financial resources.
- Microscopy results were used to identify ICs; no household visits were made to identify contacts.
- An average of 2.6 (2015/770) contacts per IC were identified.
- Evaluation of TB contacts was performed once; no 24-month follow-up monitoring.
- No uniquely designed data collection and reporting forms are available.
- In total, only 1.6% (32/2015) active TB cases were identified among TB contacts.

Intervention & Response

The USAID Cure Tuberculosis Project helped revise and update TB CI processes by:

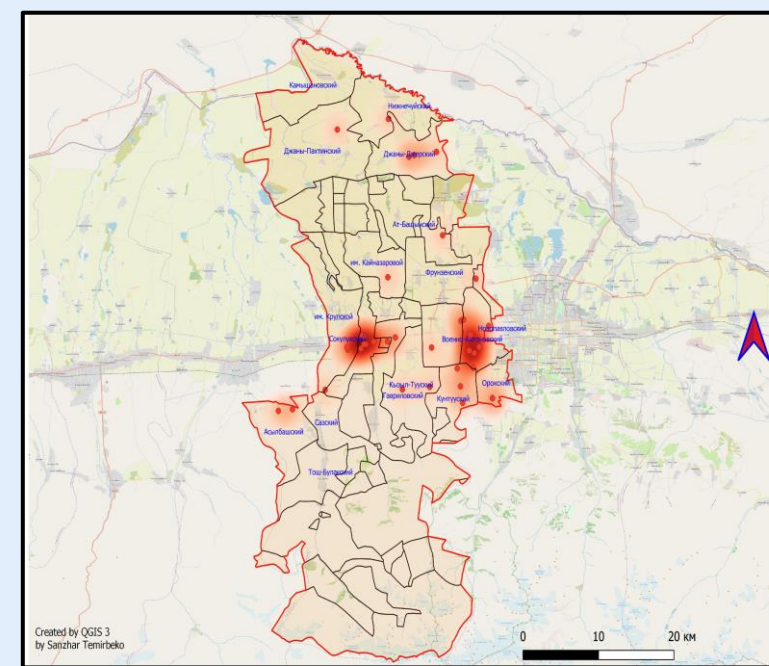
- Including GeneXpert results as criteria for IC.
- Updating CI protocols requiring in-person visits, documenting permanent residence for each IC.
- Recruiting and training independent epidemiologists on the extended CI protocol.
- Revising the examination protocols for TB patients in PHCs.
- Developing data collection and reporting forms.
- Training PHC specialists on the extended CI protocol.
- Implementing Geographic Information System (GIS) for TB IC geolocation.

Results

The updated TB CI implementation was launched in two pilot regions in 2021.

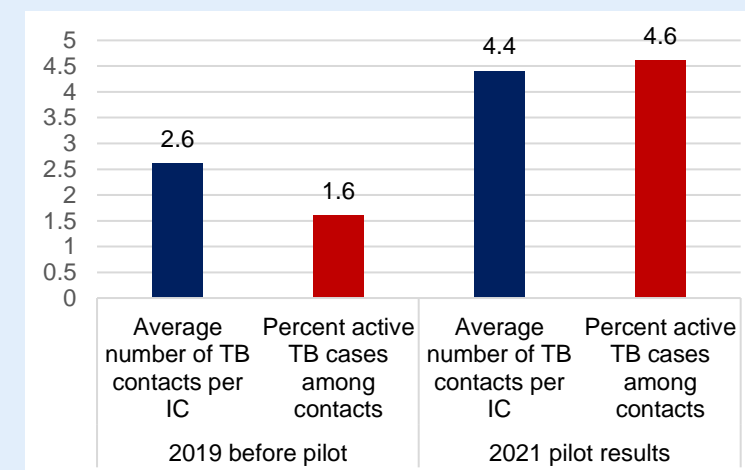
- 90% of the identified ICs were covered by CI.
- On average, 4.4 (535/122) contacts were identified for each IC. Of the contacts examined, 4.6% (23/505) had active TB and 69.6% (16/23) were children under 14.

GIS was used to determine the geolocation of TB ICs in identified hot-spot TB areas (map of Sokuluk district below).



Conclusions

The updated TB CI strategy in Kyrgyzstan helped **increase the number of TB contacts identified, as well as active TB cases detected among contacts**, including children under 14 years of age.



Improved CI protocols and personal meetings with TB contacts **improved their adherence to treatment**.

Of note, TB CI requires a standardized reporting and recording form for monitoring and evaluation purposes. Additionally, TB CI activities require adequate human and financial resources.

Finally, use of GIS greatly enhanced **geolocation of TB hot-spots**.